

Universal Testing Machine

Model: NRI-TS500 - xx

Application

- The series single column testing system for tension and compression applications where loads less than 5kN.
- >Designed with strong linear motion guide and servo motor.
- >Increased lateral stiffness to ensure linear crosshead travel.
- >Servo motor equipped with precise planet-gear speed reducer providing higher efficiency and low noise.
- >Wide range of test accessories allows to meet test requirements of different standards and for different materials.
- >This series is suitable to test: plastics, wires, bars, biomaterials, adhesive materials, etc...



Standards:

ASTMA370, ASTM E4, ASTM E8, ASTM E9, ISO 6892, ISO 7438, ISO 7500-1, EN 10002-4, GB/T 228-2002, HGT 3844-2008, QBT 11130-1991, GB 13-22-1991, HGT 3849-2008, GB 6349-1986, GB/T 1040.2-2006, ASTM C165, EN 826,

Model	NRI-TS500-1S	NRI-TS500-2S	NRI-TS500-5S
Max. Capacity	1.0 kN	2kN	5 kN
Measuring system	Conforms to JIS B7721,ISO 7500-1,BS1610 ,DIN51221 Class 0.5,and ASTM E4 Grade 0.5		
Test speed (mm/min)	0.001 ~ 1000		
Speed precision	±0.1%		
Force measurement	Load cell 2±0.1% mV/V		
Position	Optical encoder		
Crosshead position precision	Within ±0.1% of indicated value		
Effective stroke (mm)	Normal : 900 mm	Normal : 1,000 mm	
	Extra - height model : 1400 mm		
Control system	Computer control & Software : Click Start , Auto End & Return system		
Data sampling rate	84 kHz		
Power supply(Volt)	220-230 VAC : 50 Hz		
Smart Controller	Attached on right side of main unit - detachable		



084-928-5202, 02-383-2679-80



<https://www.narin-instrument.co.th>



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Universal Testing Machine

Model: WDS, WDW

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MODEL	WDS-01,02,03,05,1,2,3,5	WDW-01,02,03,05,1,2,3,5
Max. Load(kN)	1,2,3,5	1,2,3,5
Control method	Digital Display	Computer control
Calibration standard	ISO 7500	
Load accuracy	Class 1	Class 0.5
Load range	2% ~ 100%F·S	0.4% ~ 100%F·S
Resolution of displacement	0.01mm	
Test speed(mm/min)	0.05-500	0.05-500
Tensile space(mm)	600 (Can be customized)	
Compression space(mm)	600 (Can be customized)	
Working environment	Room temperature 10℃ ~ 30℃, relative humidity ≤ 80%	
Power supply	AC220V±10%, 50Hz/60Hz (can be customized)	
Grips	Wedge type, plate type and other grips as consumer's demand	
Dimension(mm)	425*400*1315mm	
Gross Weight	100kg	



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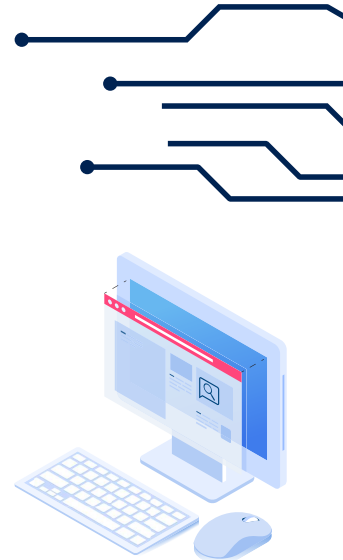
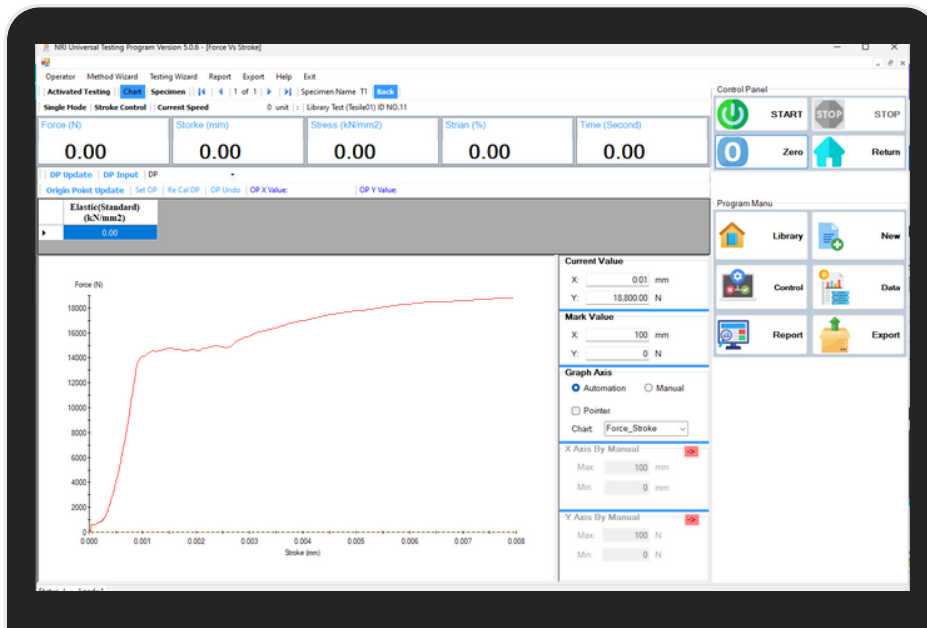
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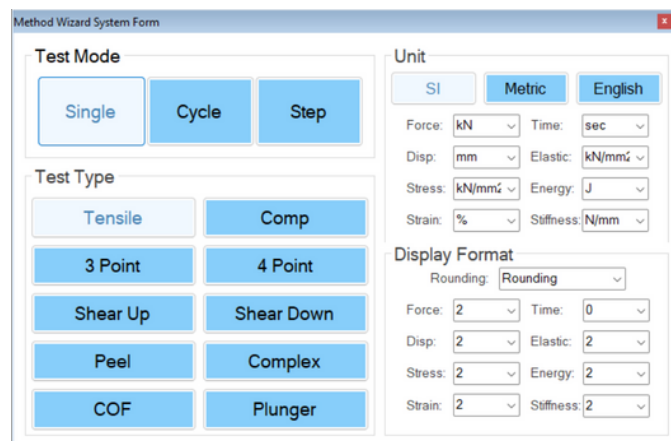
Universal Testing Machine

NRI V.5.0



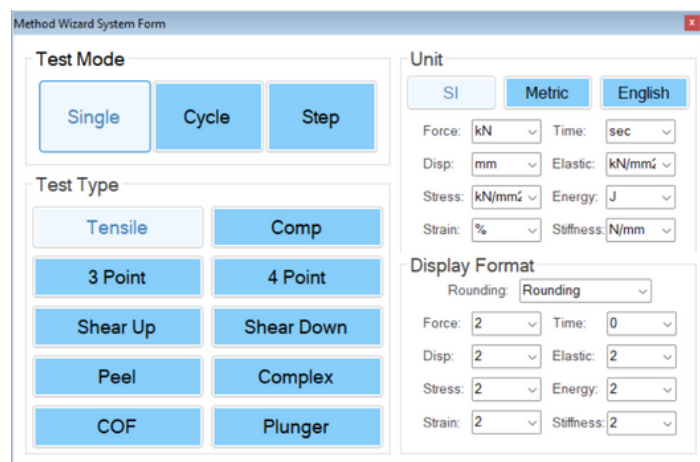
TEST MODE

- Single
- Cycle
- Step

TEST TYPE

- Tensile
- Compression
- 3 Point
- 4 Point
- Shear Up
- Shear Down
- Peeling
- Complex
- COF
- Plunger

Universal Testing Machine

NRI V.5.0



Unit

SI Metric English

Force: kN Time: sec

Disp: mm Elastic: kN/mm²

Stress: kN/mm² Energy: J

Strain: % Stiffness: N/mm

Display Format

Rounding: Rounding

Force: 2 Time: 0

Disp: 2 Elastic: 2

Stress: 2 Energy: 2

Strain: 2 Stiffness: 2



UNIT

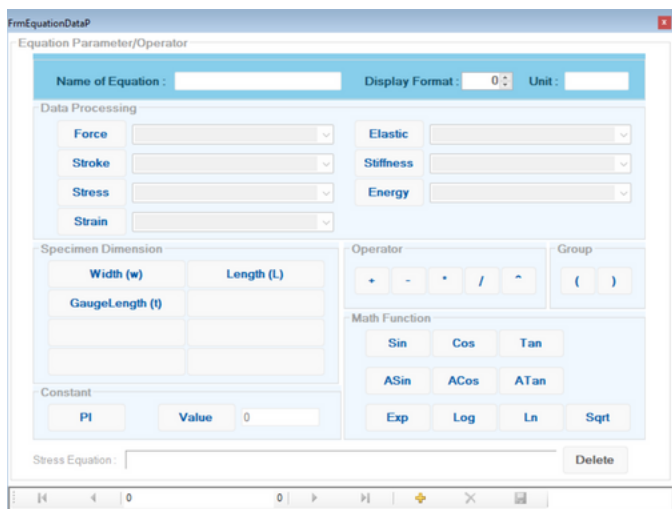
- SI
- METRIC
- ENGLIST



CUSTOM DISPLAY

DATA PROCESSING

- Select Result By Use
- Calculator Statistics

Equation Parameter/Operator

Name of Equation: Display Format: 0.2 Unit:

Data Processing

Force Elastic

Stroke Stiffness

Stress Energy

Strain

Specimen Dimension

Width (w) Length (L)

GaugeLength (l)

Operator

Math Function

Sin Cos Tan

ASin ACos ATan

Exp Log Ln Sqrt

Constant

PI Value 0

Stress Equation:

Delete

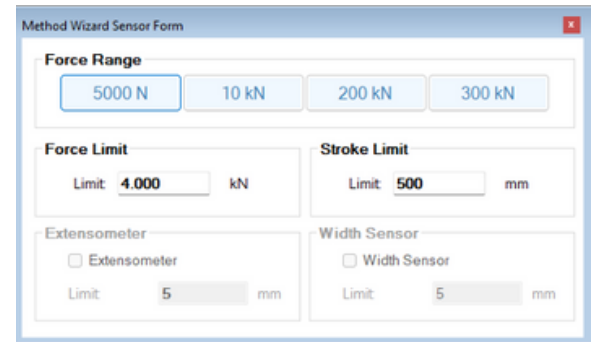


FORMULA DESIGN BY USER

MULITI SELECT CHART CUSTOM BY USER



MULTI SELEC LOAD



Method Wizard Sensor Form

Force Range

5000 N 10 kN 200 kN 300 kN

Force Limit

Limit: 4.000 kN

Stroke Limit

Limit: 500 mm

Extensometer

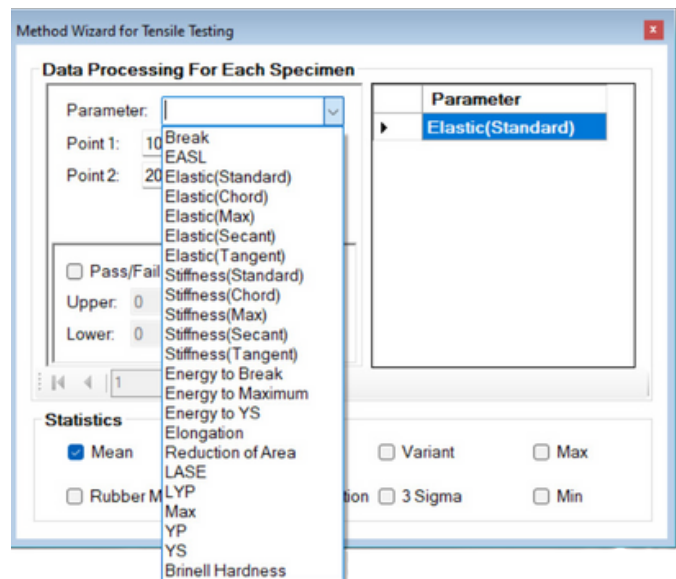
☐ Extensometer

Limit: 5 mm

Width Sensor

☐ Width Sensor

Limit: 5 mm



Method Wizard for Tensile Testing

Data Processing For Each Specimen

Parameter: Break

Point 1: 10 EASL

Point 2: 20 Elastic(Standard)

☐ Pass/Fail

Upper: 0

Lower: 0

Statistics

☒ Mean

☐ Rubber M

Parameter

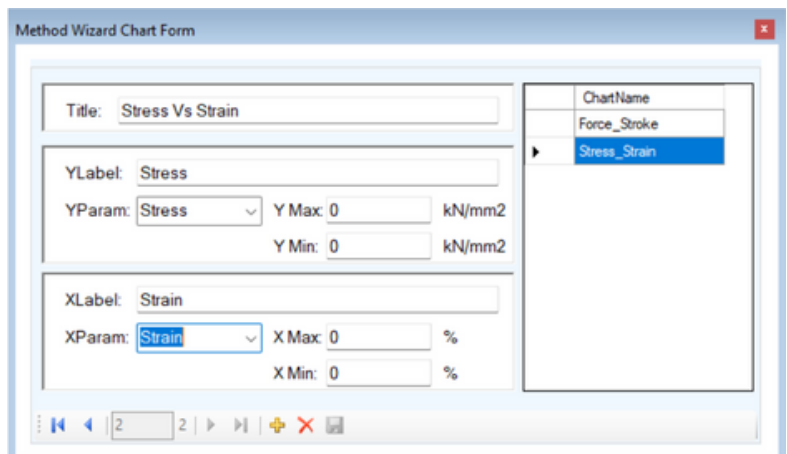
Elastic(Standard)

Variant

Max

3 Sigma

Min



Method Wizard Chart Form

Title: Stress Vs Strain

YLabel: Stress

YParam: Stress Y Max: 0 kN/mm²

Y Min: 0 kN/mm²

XLabel: Strain

XParam: Strain X Max: 0 %

X Min: 0 %

ChartName

Force_Stroke

Stress_Strain

Universal Testing Machine

NRI V.5.0



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Force: kN Time: sec

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Stress: kN/mm² Energy: J

Strain: % Stiffness: N/mm

Display Format

Rounding: Rounding

Force: 2 Time: 0

Disp: 2 Elastic: 2

Stress: 2 Energy: 2

Strain: 2 Stiffness: 2



UNIT

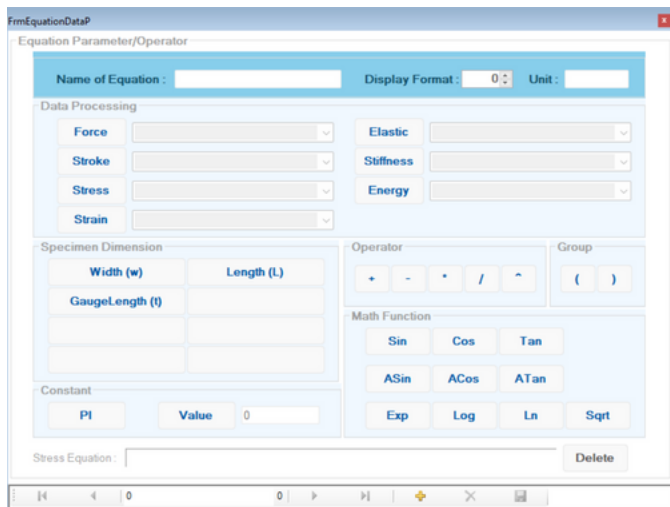
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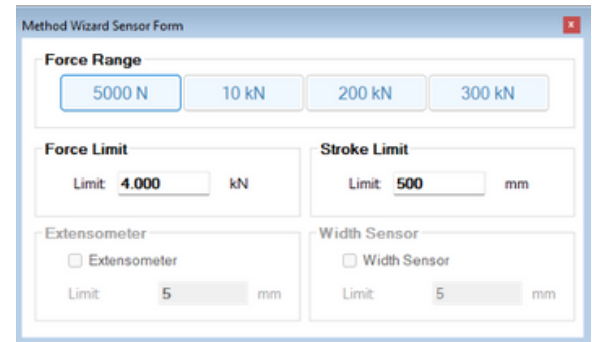


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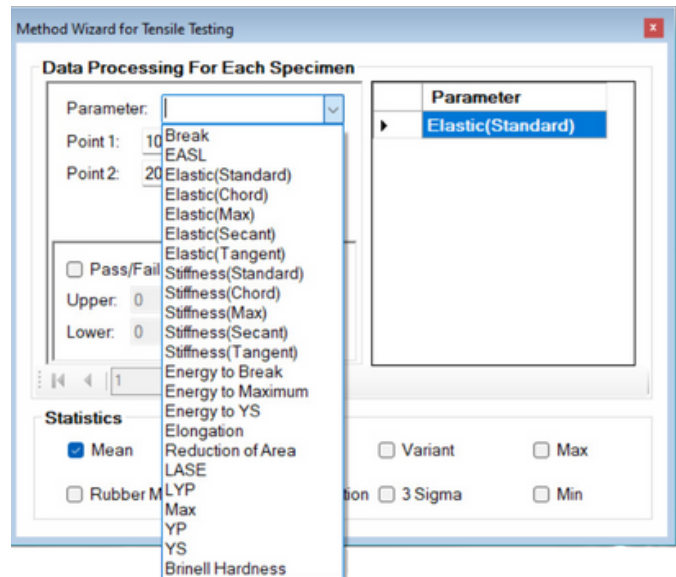
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Limit: 5 mm

Width Sensor

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Limit: 5 mm



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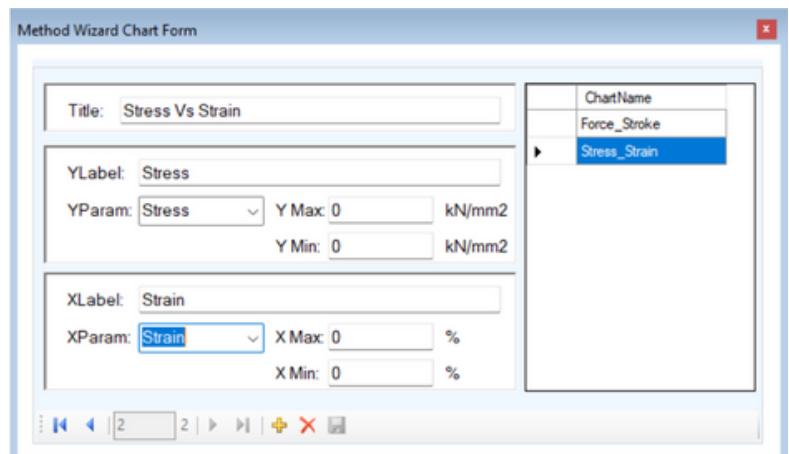
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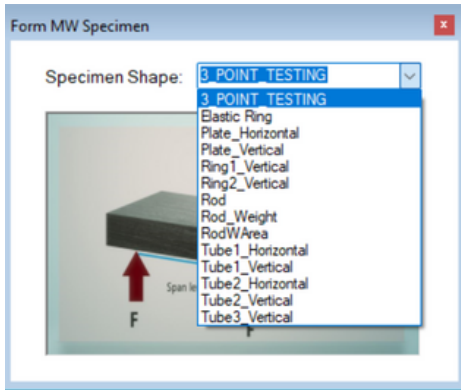
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Stress_Strain

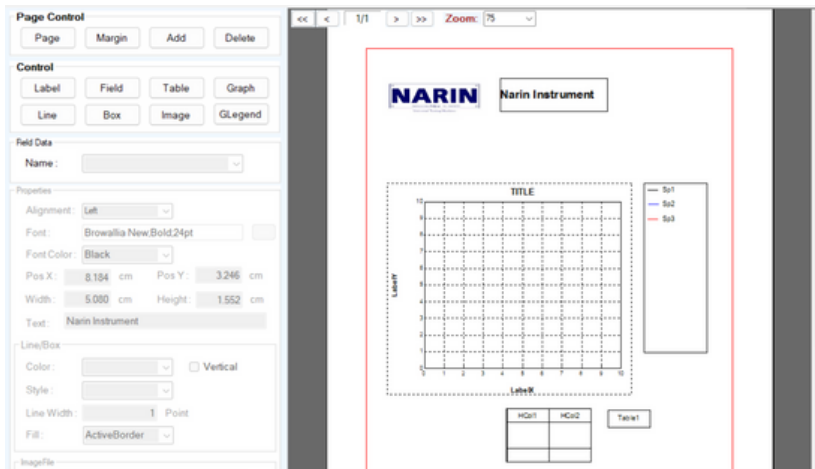
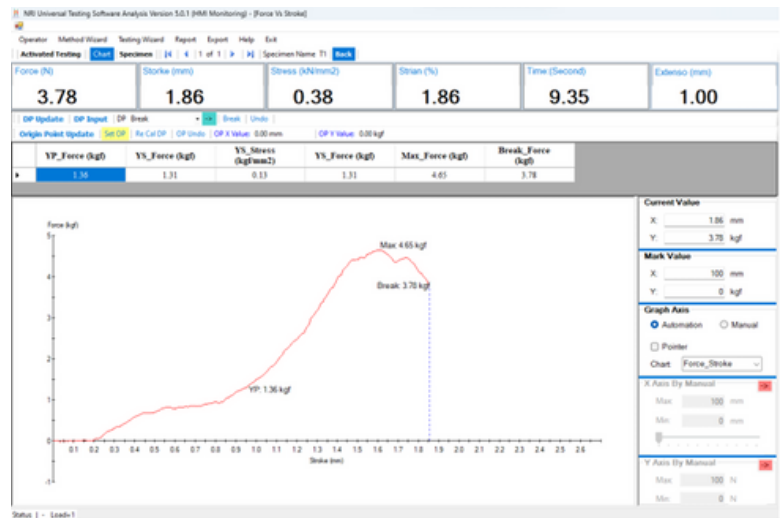
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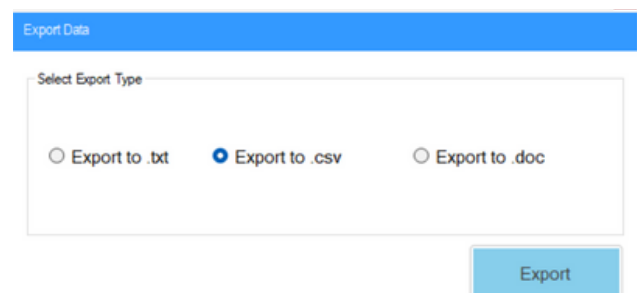
SPECIMEN SHAPE SELECT

LABELS VALUE IN CHART



CUSTOM REPORT BY USER

EXPORT RAW DATA AND RESULT



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